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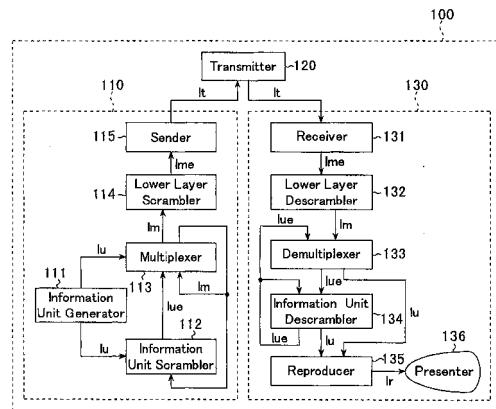
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### (54) Information transmission method and apparatus for combining multiplexing and encryption

(57) An information transmission system (100) transmits an encrypted information (It) comprised of a plurality of information units (Iu) each hierarchically encrypted and multiplexed to each other is communicated between at least two parties. The information transmission system (100) is constructed by a transmitting unit (110) and a receiving unit (130). The transmitting unit (110) is provided with an information unit generator (111) which produces the information unit (Iu); a scrambler (112) which encrypts the information unit (Iu) to produce an encrypted information unit (Iue), and multiplexer

(113) which multiplexes at least one of those information unit (Iu) and said encrypted information unit (Iue) to produce a multiplexed information unit (Im). The receiving unit (130) is provided with a lower layer descrambler (132) which decrypts the encrypted information (It) to produce a multiplexed information unit (Im), demultiplexer (133) which demultiplexes the multiplexed information unit (Im) into any of encrypted information unit (Iue), multiplexed information unit (Iue) and information unit (Iu), and information unit descrambler (134) which decrypts the encrypted information unit (Iue).

Fig. 1





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## EUROPEAN SEARCH REPORT

Application Number  
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim			
X	US 5 509 071 A (PETRIE JR CHARLES J ET AL) 16 April 1996 (1996-04-16) * column 5, line 1 - line 47 * * column 6, line 25 - column 9, line 36 * * figures 2,4,5 * ---	1-38	H04L9/00 H04N7/167 H04L9/18 H04K1/00 H04L9/06 H04L9/32		
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)		
			H04N H04L H04K		
The present search report has been drawn up for all claims					
Place of search	Date of completion of the search		Examiner		
MUNICH	30 October 2003		Apostolescu, R		
CATEGORY OF CITED DOCUMENTS					
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document					
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document					

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